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09/671,329	09/26/2000	Brian Joseph Donlan	2000-0279	6075

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EXAMINER

BUI, KIEU OANH T

ART UNIT	PAPER NUMBER
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2611

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9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/671,329

Applicant(s)

DONLAN ET AL.

Examiner

KIEU-OANH T BUI

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claims 29, 30, and 31 are objected to because of the following informalities: they are shown as dependent claims to claim 22, but claim 22 is a method claim, not a system claim; therefore, they should be dependent on claim 27 instead. Appropriate correction is required.

Claim Rejections - 35 USC 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless --
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

3. Claims 1-18, and 22-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Howe et al. (U.S. Patent No. 5,892,508/ or "Howe" hereinafter).

Regarding claim 1, Howe discloses "a system for managing the intercommunication of provisioning-related data between interconnected provisioning systems in an interactive television network" (Fig. 1, col. 1/line 26 to col. 2/line 20 for interactive TV, and col. 6/line 65 to col. 7/line 63 for an overview of the provisioning system using a network controller 16 in an interactive television network), comprising: "an ITV Provisioning Manager device" (Fig. 1/item 16 for a network controller as an ITV provisioning manager device, col. 9/line 54 to col. 10/line 8); "at least one ITV Network Component and its associated provisioning system connected to said ITV Provisioning Manager device" (Fig. 1 as other network components as an interactive server 5, a network switch 12, a network signal processor 14, and RF equipment 25 connected to

the network controller 16); “and at least one ITV Client Device connected to the at least one ITV Network Component” (Fig. 1 shows a set top box 100 as a ITV client device connected to the at least one network component via a remote terminal 65).

As for claim 2, in view of claim 1 above, Howe discloses “wherein the at least one ITV Network Component and its associated provisioning system connected to said ITV Provisioning Manager includes at least one communications network” (Fig. 1 shows a network service provider 10 connects the ITV manager or the network controller to other network components using either cell or packet switching or other suitable protocols within the communication network, see col. 7/lines 30-48).

As for claim 3, in view of claim 1 above, Howe discloses “wherein the at least one ITV Network Component and its associated provisioning system connected to said ITV Provisioning Manager includes at least one Billing System”, i.e., the interactive server 5 handles billing information within its database or disk 8A (Fig. 6 shows a closer look of the interactive server within the service provider 1, and see col. 18/lines 20-48 & col. 19/lines 13-23 for billing addressed).

As for claim 4, in view of claim 1, Howe discloses “wherein the at least one ITV Network Component and its associated provisioning system connected to said ITV Provisioning Manager includes at least one ITV Server” (Fig. 1/item 5 for an interactive server, see col. 9/lines 42-53).

As for claim 5, in view of claim 2, Howe discloses “wherein the at least one communications network is a wired or wireless communications network”, i.e., either wired or wireless communications network is used as RF is used for communicating to the client device or optical fiber (cable) is used for network communications (col. 9/line 42 to col. 10/line 34).

As for claim 6, in view of claim 5, Howe discloses “wherein the at least one communications network includes a packet data network” (col. 7/lines 30-49 for a packet data switching protocol for the communications network is addressed).

As for claim 7, in further view of claim 6, Howe shows “wherein the packet data network includes an IP data packet network” (col. 22/lines 40-52 for IP protocol, using cell or packet switching technique as suggested in col. 7/lines 30-49).

As for claim 8, in view of claim 6, Howe discloses “wherein the packet data network includes an ATM network” (col. 9/lines 42 to col. 10/line 20 as ATM cell-switching protocol within the network is addressed).

As for claim 9, in view of claim 5, Howe inherently discloses “wherein the at least one communications network includes a circuit-oriented switched telephone network” (col. 1/lines 27-40 as interactive services are performed by telephone numbers of users; and col. 2/lines 22-46 as a public telephone network is known for providing interactive services to users by providing conventional circuit-oriented switching technique).

As for claim 10, in view of claim 3, Howe shows “wherein the at least one billing system includes an ITV billing system”, i.e., the interactive server 5 handles billing information within its database or disk 8A regarding as an ITV billing system (Fig. 6 shows a closer look of the interactive server within the service provider 1, and see col. 18/lines 20-48 & col. 19/lines 13-23 for billing addressed).

As for claim 11, in view of claim 4, Howe teaches at least “wherein the at least ITV Server includes at least one of the following: an e-mail server, an address book server, a calendar server, a search server, a registration server, a web server, and an E-chat server” (Fig. 1/item 5 for an interactive server, and the interactive server is known for including most of the mentioned services, see more on col. 1/line 25 to col. 2/line 46 for a variety of interactive services).

As for claim 12, in view of claim 2, Howe discloses “wherein the at least one ITV Client Device connected to the at least one ITV Network Component includes a set-top video/audio converter decoder box” (Fig. 1/item 100 for a STB, and more on col. 20/line 45 to col. 22/line 52 for architecture of the set top box or set top video/audio converter decoder box).

As for claim 13, in view of claim 2, Howe shows “wherein the at least one ITV Client Device connected to the at least one ITV Network Component includes a television set” (Fig. 1 either item 80 or 90).

As for claim 14, in view of claim 2, Howe discloses “wherein the at least one ITV Client Device connected to the at least one ITV Network Component includes a device which processes video, audio or data signals for transmission, storage, visual display or sound emission” (Fig. 1/item 100 for a STB, and more on col. 20/line 45 to col. 22/line 52 for architecture of the set top

box or set top video/audio converter decoder box for processing video, audio or data signals for transmission, storage, visual display or sound emission).

Regarding claim 15, Howe discloses “a method of managing the provisioning of interactive client devices for connection to an interactive television network for using interactive television services, comprising: receiving from a billing system a registration code number and associated billing system identification data relating to at least one subscriber, the registration code number being associated with billing system identification data identifying said at least one subscriber, said billing system identification data describing the billing information and services preferences of said at least one subscriber; storing said registration code number and associated billing system identification data in a provisioning management database; retrieving said billing system identification data in said provisioning management database; and communicating said billing system identification data to the provisioning system of an IP data network” (see claims 1-14 above, with the addition about identification data for identifying the subscriber and the corresponding interactive program requested for billing purposes, see more on col. 18/line 20 to col. 19/line 23 & col. 22/line 55 to col. 29/line 63 for details on how to STB reacts to the user requests a program and then the system responses with either interactive services or non-interactive services and billing technique based on interactive callback address (ICA) as well as the technique on assigning the ICA on each user).

As for claims 16 and 17, in view of claim 15, Howe further shows “comprising: receiving IP registration information including one or more network addresses from the provisioning system of the IP data network; and storing said IP registration information in the provisioning management database” and “comprising: retrieving said IP registration information in said

provisioning management database; and communicating said IP registration information to the billing system” (col. 8/lines 10-27 & col. 19/lines 13-23, with IP data network as disclosed above).

Regarding claim 18, Howe discloses “an apparatus for managing the intercommunication of provisioning-related data between interconnected provisioning systems in an interactive television network” (Fig. 1, col. 1/line 26 to col. 2/line 20 for interactive TV, and col. 6/line 65 to col. 7/line 63 for an overview of the provisioning system using a network controller 16 in an interactive television network), comprising: “a data storage device for storing provisioning-related data” (Fig. 6/item 8A for database for data storage or item 9 for video storage); “at least one provisioning message interface” (Figs. 2A-2B show the message communicated between the STB and the system); “an operator interface” (col. 18/lines 1-38 for a service operator can be used); “a controller, connected with the data storage device, the at least one provisioning message interface, and the operator interface, that transmits and receives provisioning-related data messages, via the at least one provisioning message interface, to and from the provisioning system of the at least one ITV Network Component, and stores a record of said data messages in the data storage device” (Fig. 1/item 16 for a network controller as an ITV provisioning manager device, col. 9/line 54 to col. 10/line 8 and then the storing step as noted above).

Regarding claim 22, Howe discloses “a method of managing the provisioning of interactive client devices for connection to an interactive television network for using interactive television services, comprising: receiving from a first ITV network component service information relating to at least one subscriber, the service information identifying said at least one subscriber and describing at least one service preference of said at least one subscriber; determining which of a plurality of other ITV network components are to receive at least some of the service information; communicating the at least some of the service information to at least one other ITV network component, the at least one other ITV component network being different from the first ITV network component and providing a service requested by the at least one subscriber; receiving from the at least one other ITV network component service providing information, the service providing information enabling the subscriber to access the service provided by the at least one other ITV component; and providing the service providing information to the subscriber”, i.e., more than one ITV network component (item 60 indicates more than one subscriber, and each subscriber has more than one receiving device 80 and 90) receives the at least service information from a plurality of content provider A...N, and the service is based on the user's preference and requested information from the users (Fig. 1, and with the addition about identification data for identifying the subscriber and the corresponding interactive program requested for billing purposes, see more on col. 18/line 20 to col. 19/line 23; col. 19/line 60-col. 20/line 44 for an interactive server responses to the user's preference and requests & col. 22/line 55 to col. 29/line 63 for details on how to STB reacts to the user requests a program and then the system responses with either interactive services or non-interactive

services and billing technique based on interactive callback address (ICA) as well as the technique on assigning the ICA on each user).

As for claims 23-26, Howe discloses the steps of “further comprising: storing said service information in a provisioning management database; retrieving said service information in said provisioning management database; and communicating said service information to a provisioning system of an ITV network component”; “storing said service providing information in a provisioning management database; retrieving said service providing information in said provisioning management database; and providing the service providing information to an ITV network component”; “providing the service providing information to an ITV network component that is a billing system”; and “wherein the service providing information includes one or more network addresses from the provisioning system of an IP data network” (see claims 2-4, 7 and 15 above).

As for claims 27-31, these claims for “a system for managing the provisioning of interactive client devices for connection to an interactive television network for using interactive television services, comprising: first receiving means for receiving from a first ITV network component service information relating to at least one subscriber, the service information identifying said at least one subscriber and describing at least one service preference of said at least one subscriber; determining means for determining which of a plurality of other ITV network components are to receive at least some of the service information; communicating means for communicating the at least some of the service information to at least one other ITV network component, the at least one other ITV network component being different from the first ITV network component and providing a service requested by the at least one subscriber; second

receiving means for receiving from the at least one other ITV network component service providing information, the service providing information enabling the subscriber to access the service provided by the at least one other ITV component; and providing means for providing the service providing information to the subscriber” with same limitations as addressed earlier are rejected for the reasons given in the scope of claims 1-17 as disclosed above.

Claim Rejections - 35 USC 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howe et al. (U.S. Patent No. 5,892,508) in view of Kaiser et al. (U.S. Patent No. 6,615,408 B1).

Regarding claims 19-21, in further view of claim 18, Howe does not further disclose “wherein the at least one provisioning message interface is an XML an interface” within the already discussed steps of “connecting the apparatus with a provisioning system of at least one subscriber management billing system”; “connecting the apparatus with a provisioning system of at least one communications network”; and “connecting the apparatus with a provisioning system of at least one ITV Server” earlier; however, the technique of using an XML message interface is known in the art. In fact, Kaiser, while providing video resource data to the users via the Internet

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using the data network, teaches that resource data can be in a variety of forms such as HTML, XML, or SGML pages, scripts, and programs, which suggests to include XML interface for handling XML messages (Kaiser, col. 5/line 45 to col. 6/line 8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Howe's system with known XML message interface as suggested by Kaiser in order to handle a variety of data formats while retrieving information data from different data sources. The motivation for doing this is to offer flexible communications in handling various message types via the Internet.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Howe et al. (US Patent 6,502,242 B1), Jerding (US Patent 6,738,982 B1), Murphy (US Patent 6,564,380 B1), and Hoarty (US Patent 5,883,661) disclose systems related to managing the intercommunication of provisioning data between interconnected systems and an interactive television network.

7. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9306, (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park 77, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista Kieu-Oanh Bui whose telephone number is (703) 305-0095. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:30 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached on (703) 305-4380.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Krista Bui
Art Unit 2611
June 02, 2004



KRISTA BUI
PATENT EXAMINER